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(54) Title: SPATIAL FOR ALTERING CELL PROLIFERATION

(57) Abstract: This disclosure provides methods useful for altering cell proliferation by modifying SPATIAL activity in cells. In some methods, thymocyte numbers in subjects with disease-associated immunodeficiencies are increased by administering an agent that inhibits SPATIAL activity. Also provided are methods useful for increasing thymocyte number in a subject by administering an agent that interferes with an interaction between SPATIAL and Uba3. In other methods, cell growth is inhibited by introducing or expressing a SPATIAL or SPATIAL-related polypeptide or nucleic acid in one or more cell(s), such as neoplastic cell(s). Further provided are methods of identifying agents that modify (for example, inhibit) SPATIAL expression or activity, or which interfere with an interaction between SPATIAL and Uba3 polypeptides, and therefore which are useful in influencing thymocyte number.

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